

REMARKS

In response to the Final Rejection of October 28, 2008, applicants respectfully request reconsideration of the rejection of previously presented Claims 23-30 and newly added Claim 31. Claim 23 is in independent form while each of Claims 24-31 depend therefrom, either directly or indirectly.

Independent Claim 23 defines a capacitor having a negative electrode including composite material. The composite material includes a conductive polymer and an ionic liquid capable of repairing a defect in the anodized film forming a dielectric on a valve metal, positive electrode. The capacitor of the invention achieves excellent electron conductivity and oxide film repairing ability by combining the ionic liquid with the conductive polymer. As a result, an electrolytic capacitor with a low impedance and a high withstand voltage is formed. Specifically, excellent electron conductivity is realized by the conductive polymer in the negative electrode and excellent oxide film repairing ability is realized by the ionic liquid.

In the final rejection, the Examiner contends that claim 23 is anticipated by the Shiraishi et al. ('289) reference. Specifically, the Examiner states that this reference discloses:

- a positive electrode (1) of a valve metal,
- a dielectric (3) of an anodized film formed on the valve metal
- and a negative electrode (5) including a composite material in contact with the anodized film,
- wherein the composite material includes a conductive polymer and an ionic liquid capable of repairing a defect in the anodized film.

In response, the applicants submit that although the negative electrode of the capacitor in the disclosure of the Shiraishi et al. reference has a conductive polymer, the electrode does not have the ionic liquid capable of repairing a defect in the anodize film. Accordingly, Claim 23 cannot be anticipated by the disclosure of the Shiraishi et al. reference.

Furthermore, since the composite material includes the conductive polymer and the ionic liquid in the claimed invention, the capacitor has a high withstand voltage

compared to the capacitor which does not include the ionic liquid. See examples 28-44 and comparative example 4 of the invention description in that regard. In addition, Shiraishi et al. does not teach or suggest that the capacitor having the negative electrode, including the ionic liquid, has the excellent oxide film repairing ability and, as a result, has a high withstand voltage. Accordingly, applicants submit that there is no evidence that the Claim 23 invention would have been obvious to a person of ordinary skill in the relevant art.

Finally, the method of producing an electrolytic capacitor described in Claim 1 of Shiraishi et al. involves immersing the valve metal foil in a conductive monomer solution wherein another electrolyzing electrode is disposed in the solution apart from the opposite side of the valve metal foil with respect to the one electrolyzing electrode. The result is that the solution between the one electrode and the other electrode is electrolyzed to polymerize the monomer. In other words, Shiraishi et al. teaches that the conductive polymer is synthesized by the electrolytic polymerization. However, Shiraishi et al. does not teach or suggest that the ionic liquid capable of repairing a defect in the anodized film is used when synthesizing the conductive polymer film. Therefore, in Shiraishi et al. the negative electrode does not have the ionic liquid capable of repairing a defect in the anodized film.

For the aforescribed reasons, applicants respectfully submit that Claims 23-31 should be allowable. Passage of the application to issue is respectfully requested.

Respectfully submitted,

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